Umar Mansoor

ST10445996

Link to Repository:

https://github.com/UM1811/weather\_app\_st10445996Umar

The purpose of this app was to show weather conditions in the local area. It shows the user the minimum and maximum temperatures of the local weather as well as the local weather conditions.

**Pseudocode:**

MainActivity

OnCreate

setContentView(activity\_main)

findViewById for etTemperatureInput, btnAddTemperature, tvAverageTemperature, btnClearData, btnViewDailyDetails

Initialize temperatures list

btnAddTemperature setOnClickListener

temperature = etTemperatureInput.text.toString().toDoubleOrNull()

if temperature is not null

temperatures.add(temperature)

updateAverageTemperature()

etTemperatureInput.text.clear()

else

etTemperatureInput.error = "Please enter a valid temperature"

btnClearData setOnClickListener

temperatures.clear()

updateAverageTemperature()

btnViewDailyDetails setOnClickListener

intent = Intent(this, DetailActivity)

intent.putExtra("temperatures", temperatures.toDoubleArray())

startActivity(intent)

updateAverageTemperature

if temperatures is not empty

average = temperatures.average()

tvAverageTemperature.text = "Average Temperature: $average°C"

else

tvAverageTemperature.text = "No temperatures recorded"

DetailActivity

OnCreate

setContentView(activity\_detail)

temperatures = intent.getDoubleArrayExtra("temperatures").toList() or empty list

findViewById for detailsListView, backButton

details = temperatures.mapIndexed { index, temp -> "Day ${index + 1}: $temp°C" }

adapter = ArrayAdapter(this, android.R.layout.simple\_list\_item\_1, details)

detailsListView.adapter = adapter

backButton setOnClickListener

finish()

AndroidManifest.xml

Declare MainActivity

Declare DetailActivity

Layout: activity\_main.xml

LinearLayout vertical

EditText id=etTemperatureInput hint="Enter temperature" inputType="numberDecimal"

Button id=btnAddTemperature text="Add Temperature"

TextView id=tvAverageTemperature text="No temperatures recorded" textSize=18sp paddingTop=16dp

Button id=btnClearData text="Clear Data"

Button id=btnViewDailyDetails text="View Daily Details"

Layout: activity\_detail.xml

LinearLayout vertical

ListView id=detailsListView

Button id=backButton text="Back"